

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

WHAT IS CLAIMED IS

1
2 1. A head for string trimmer machines including: a housing
3 member having a central axis for attachment to a string trimmer
4 machine; and a serpentine guide path in the housing for receiving
5 a length of trimmer line, the guide path located in a plane
6 including the central axis and terminating in exit openings on
7 opposite sides of the housing member.

8
9 2. A head according to Claim 1 wherein the exit openings are
10 located in a second plane perpendicular to the plane including the
11 central axis, and wherein the guide path has a portion thereof
12 located above or below the second plane.

13
14 3. A head according to Claim 2 wherein the exit openings are
15 located on diametrically opposite sides of the housing member.

16
17 4. A head according to Claim 3 wherein at least the portion
18 of the exit openings in contact with a trimmer line when pulled
19 outwardly from the exit openings is metal.

20
21 5. A head according to Claim 4 wherein the housing member
22 includes an upper housing portion and a lower housing portion with
23 the guide path formed by cooperating parts of the upper and lower
24 housing portions.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26

6. A head according to Claim 5 wherein the upper and lower housing portions are releasably interconnected with one another.

7. A head according to Claim 6 wherein the lower housing portion has an upper side and a lower side, with the upper side thereof releasably interconnected with the upper housing portion and the lower side thereof exposing part of the guide path to permit insertion and removal of a segment of string trimmer line thereat.

8. A head according to Claim 7 wherein the releasable interconnection of the upper and lower housing portions of the housing is effected by spring tabs extending upwardly from the lower housing portions with corresponding tab-engaging shoulders on the upper housing portion for releasable engagement by the spring tabs.

9. A head according to Claim 8 including a second serpentine guide path in the housing member located in a second plane including the central axis, the second guide path terminating in a second set of exit openings on opposite sides of the housing member.

10. A head according to Claim 9 wherein the guide paths are perpendicular to one another.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26

11. A head according to Claim 1 including a second serpentine guide path in the housing member located in a second plane including the central axis, the second guide path terminating in a second set of exit openings on opposite sides of the housing member.

12. A head according to Claim 11 wherein the guide paths are perpendicular to one another.

13. A head according to Claim 1 wherein the housing member includes an upper housing portion and a lower housing portion with the guide path formed by cooperating parts of the upper and lower housing portions.

14. A head according to Claim 13 wherein the upper and lower housing portions are releasably interconnected with one another.

15. A head according to Claim 14 wherein the lower housing portion has an upper side and a lower side, with the upper side thereof releasably interconnected with the upper housing portion and the lower side thereof exposing part of the guide path to permit insertion and removal of a segment of string trimmer line thereat.

16. A head according to Claim 15 wherein the releasable interconnection of the upper and lower housing portions of the housing is effected by spring tabs extending upwardly from the lower housing portions with corresponding tab-engaging shoulders on the upper housing portion for releasable engagement by the spring tabs.

17. A head according to Claim 1 wherein at least the portion of the exit openings in contact with a trimmer line when pulled outwardly from the exit openings is metal.

18. A head according to Claim 17 wherein the exit openings are located on diametrically opposite sides of the housing member.

19. A head for string trimmer machines including:

an upper housing portion having a central axis for attachment to the drive shaft of a string trimmer machine;

a lower housing portion for releasable interconnection with the upper housing member, and having a central axis aligned with the central axis of the upper portion member; and

cooperating channels on the upper housing portion and the lower housing portion forming a non-linear serpentine guide path for a length of trimmer line, the guide path located in a plane including the central axes of the upper and lower housing portions and terminating in exit openings on opposite sides thereof.

20. A head according to Claim 19 wherein the exit openings are located in a second plane perpendicular to the plane including the central axis, and wherein the guide path has a portion thereof located above or below the second plane.

21. A head according to Claim 20 wherein at least the portion of the exit openings in contact with a trimmer line when pulled outwardly from the exit openings is metal.

22. A head according to Claim 19 wherein at least the portion of the exit openings in contact with a trimmer line when pulled outwardly from the exit openings is metal.

23. A head according to Claim 22 wherein the guide path has, at least in part, a cross-sectional configuration conforming to the cross-sectional configuration of a string trimmer line to be guided therein.

24. A head according to Claim 23 wherein the releasable interconnection of the upper and lower housing portions of the housing is effected by spring tabs extending upwardly from the lower housing portions with corresponding tab-engaging shoulders on the upper housing portion for releasable engagement by the spring tabs.

LAW OFFICE OF
LAVALLE D. PTAK
28435 N. 42ND ST., STE. B
CAVE CREEK, ARIZONA 85331
(480) 419-9019

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26

25. A head according to Claim 19 wherein at least the portion of the exit openings in contact with a trimmer line when pulled outwardly from the exit openings is metal.

26. A head according to Claim 19 wherein the guide path has, at least in part, a cross-sectional configuration conforming to the cross-sectional configuration of a string trimmer line to be guided therein.

27. A head according to Claim 26 wherein at least the portion of the exit openings in contact with a trimmer line when pulled outwardly from the exit openings is metal.

28. A head for string trimmer machines including: a housing member having a central axis and adapted for attachment to the drive shaft of a string trimmer machine; and means in the housing member for guiding a length of string trimmer line in a serpentine path in a plane including the central axis, the path terminating in exit openings on opposite sides of the housing member.

29. A head according to Claim 28 further including means for providing access to the non-linear guide path at a point intermediate the length of the guide path.

LAW OFFICE OF
LAVALLE D. PTAK
28435 N. 42ND ST., STE. B
CAVE CREEK, ARIZONA 85331
(480) 419-9019

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26

31. The head according to Claim 29 wherein the cross-sectional configuration of at least a portion of the guide path is a rectangular cross section.

32. The head according to Claim 28 wherein the cross-sectional configuration of at least a portion of the guide path is a rectangular cross section.